## **Maintenance**

Ensure the air line is shut-off and drained of air before removing this tool for service. This will prevent the tool from operating if the throttle is accidentally engaged.

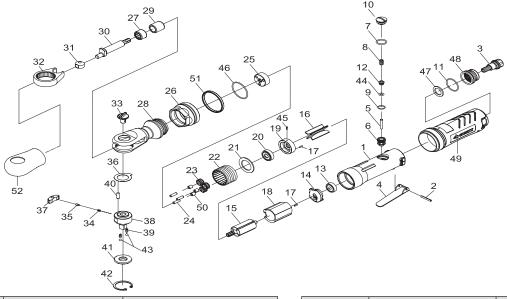
## LUBRICATION

- □ An in-line filter-regulator-lubricator is recommended as it increases tool life and keeps the tool in sustained operation.
- □ Regularly check and fill the in-line lubricator with air tool oil. Avoid using excessive amounts of oil.
- □ Adjust the in-line lubricator by placing a sheet of paper next to the tool's exhaust ports and holding the throttle open approximately 30 seconds. The lubricator is properly set when a light stain of oil collects on the paper.
- If it is necessary to store the tool for an extended period of time (overnight, weekend, etc.), generously lubricate the tool through the air inlet. Run the tool for approximately 30 seconds to ensure the oil is evenly distributed throughout the tool. Store the tool in a clean and dry environment.
- Recommended lubricants: Air tool oil or any other high grade turbine oil containing moisture absorbent, rust inhibitors, metal wetting agents, and an EP (extreme pressure) additive.

## **Troubleshooting**

Problem	Possible Cause	Solution
The tool runs slowly or will not operate.	There is grit or gum in the tool.	Flush the tool with air tool oil or gum solvent.
	The tool is out of oil.	Lubricate the tool according to the lubrication instructions in this manual.
	The air pressure is low.	<ul> <li>Adjust the regulator on the tool to the maximum setting.</li> </ul>
		<ul> <li>Adjust the compressor regulator to the tool's maximum setting of 90 psi.</li> </ul>
	The air hose leaks.	Tighten and seal the hose fittings with pipe thread tape if leaks are found.
	The air pressure drops.	□ Ensure the hose is the proper size. Long hoses or tools using large volumes of air may require a hose with an I.D. of ½" or larger depending on the total length of the hose.
		<ul> <li>Do not use a multiple number of hoses connected together with a quick connect fitting. This causes additional pressure drops and reduces the tool power. Directly connect the hoses together.</li> </ul>
	There is a worn rotor blade in the motor.	Replace the rotor blade.
	There is a worn ball bearing in the motor.	Remove and inspect the bearing for rust, dirt, and grit. Replace or clean and grease the bearing with bearing grease.
There is moisture blowing out of the tool's exhaust.	There is water in the tank.	Drain the tank. (See the air compressor manual for instructions.) Lubricate the tool and run it until water is not evident. Lubricate the tool again and run for 1-2 seconds.

## **Service Parts**



	<b>y</b>		
Reference Number	Part Number	Description	
1	933-312301	Housing	
2	950102	Spring Pin	
3	933-312303	Air Inlet	
4	933-301304	Throttle Lever	
5	933-301305	Throttle Valve	
6	933-312306	Valve	
7	9706109	0-Ring	
8	933-301308	Spring	
9	90R01000105-1	0-Ring	
10	933-312310	Valve Plug	
11	90R02607108	0-Ring	
12	933-301307	Throttle Valve	
13	9052213	Ball Bearing	
14	9301114	Rear End Plate	
15	930115	Rotor	
16	930116	Rotor Blade (4)	
17	930117	Pin (2)	
18	950118	Cylinder	
19	933-301319	Front End Plate	
20	9030120	Ball Bearing	
21	930121	Washer	
22	930122	Thread Ring Gear	
23	933-3013L23	Idler Gear (3)	
24	930124	Idler Gear Pin (3)	
25	930125	Idler Gear Plate	
26	933-312317	Clamp Plate	

Reference Number	Part Number	Description
27	9030129	Needle Bearing
28	933-301328	Ratchet Housing
29	930129	Bushing
30	933-301330	Crank Shaft
31	933-301331	Drive Bushing
32	933-301332	Yoke
33	933-301333	Reverse Button
34	933-301334	Spring
35	933-301335	Lock Ring
36	930136	Washer
37	930137	Ratchet Pawl
38	930138	Ratchet Anvil 3/8"
39	930139	Spring (2)
40	930140-1	Pin
41	933-301336	Thrust Washer
42	930142	Retainer Ring
43	930143	Steel Ball (2)
44	930107-V	0-Ring
45	970117	Spring Pin
46	9P91237	0-Ring
47	933-302312	Damping Material
48	933-302311	Deflector
49	933-312352	Grip
50	980225	Bushing (3)
51	9526212	Decoration Ring
52	930152	Rubber Boot